

Claims:

1. A clamp (1), particularly for connecting the end of a flexible tubing or pipe (2) to a pipe (3), this clamp having opposite-lying flange segments (4, 5) that stick out essentially radially and on which the clamp (1) can be tightened around the connection, characterized in that,

in the region of at least one of the flange segments (4, 5) are constructed means (6) for preventing the spreading of the clamp material under tension.

2. The clamp (1) in accordance with claim 1, further characterized in that the means (6) for preventing spreading are arranged at least in part in the region of the angle (7) between the clamping band (8) of the clamp (1) and the flange segments (4, 5).

3. The clamp (1) in accordance with claim 1, further characterized in that the means (6) for preventing spreading have at least one rib (6.1).

4. The clamp (1) in accordance with claim 3, further characterized in that the rib (6.1) is molded into the clamp material as a bead.

5. The clamp (1) in accordance with one of claims 1 to 3, further characterized in that the rib (6.1) is constructed as angle sheet iron.

6. The clamp (1) in accordance with at least one of the preceding claims, further characterized in that the rib (6.1) is arranged on the edge of the clamp (1).

7. The clamp (1) in accordance with either claim 5 or 6, further characterized in that the rib (6.1) is welded on.

8. The clamp (1) in accordance with claim 2, further characterized in that the means for preventing spreading consists of spot welds / weld seams, by means of which clamp components are fastened.

9. The clamp (1) in accordance with one of the preceding claims, further characterized in that the means (6) for preventing spreading is constructed as a rotation lock for the means of tightening (9) for tightening the clamp (1).

10. The clamp (1) in accordance with one of the preceding claims, further characterized in that the flange segments (4, 5) that stick out radially have reinforcing plates (10), which are adjusted to the contour of the clamp steps and / or have a recess (13) at the site of a rib.

11. The clamp (1) in accordance with at least one of the claims 1 to 9 or 10, further characterized in that the means of tightening (9) have a bolt nut arrangement and a polygon (12) – for example, a square – is formed on the bolt (11) and is accommodated by a correspondingly formed hole (14) in the flange segments (4, 5) in a manner that prevents rotation.

12. The clamp (1) in accordance with claim 11, further characterized in that an undercut (15) is formed on the nut of the bolt nut arrangement for accommodating a region of the polygon.

13. The clamp (1) in accordance with at least one of the preceding claims, further characterized in that means (6) for preventing spreading are furnished on the two flange segments (4, 5) and the means for tightening (9) are constructed as a reverse system and, as need be, can be brought into action from one side or the other side of the flange segments (4, 5).

14. The clamp (1) in accordance with at least one of the preceding claims, further characterized by a clamping band (8) with two free ends, which encompass the connection, whereby the gap between the two free ends of the clamping band (8) is saddled by a sliding crosspiece (10).

15. The clamp (1) in accordance with claim 14, further characterized in that the sliding crosspiece (10) is essentially square.

16. The clamp (1) in accordance with claim 14 or 15, further characterized in that the sliding crosspiece (10) has a stepped impression (24).
17. The clamp (1) in accordance with claim 16, further characterized in that the stepped impression (24) of the sliding crosspiece (10), prior to assembly, extends only over a part of the length of its perimeter, whereas the sliding crosspiece (10), prior to assembly, is essentially flat along the remaining part of the length of its perimeter.
18. The clamp (1) in accordance with at least one of claims 1 to 17, further characterized in that the sliding crosspiece (10) has a thickness of 0.2 mm to 0.3 mm.
19. The clamp (1) in accordance with at least one of claims 14 to 18, further characterized in that the sliding crosspiece (10) is made of high-strength material.
20. The clamp (1) in accordance with at least one of claims 14 to 19, further characterized in that the crosspiece (10) is made of deformable material.
21. The clamp (1) in accordance with at least one of the preceding claims, further characterized in that a sealing element (25) is arranged between the two flange segments (4, 5).
22. The clamp (1) in accordance with claim 21, further characterized in that the sealing element (25) is strip-shaped.
23. The clamp (1) in accordance with claim 22, further characterized in that the sealing element (25) has a round cross section.
24. The clamp (1) in accordance with one of claims 21 to 23, further characterized in that the sealing element (25) is made of a material that is resistant to high temperature.
25. The clamp (1) in accordance with claim 23, further characterized in that the sealing element (25) is made of glass fiber.

26. The clamp (1) in accordance with at least one of the preceding claims, further characterized by a clamping band (8) encircling the mutually associated ends, the clamping gap (21) of which is covered with a saddle (18), wherein, on the saddle (18), those edges (19) that tightly interact with the clamping band are furnished with a means (20) for preventing leakage (20).
27. The clamp (1) in accordance with claim 25, further characterized in that the means (20) for preventing leakage is constructed as a labyrinth seal (20.1).
28. The clamp (1) in accordance with claim 26, further characterized in that the edges (19) and the edge (18.1) of an associated impression (18.2) in the clamping band (8) have a labyrinth-like course.
29. The clamp (1) in accordance with one of claims 25 to 27, further characterized in that the means (20) for preventing leakage is a plastically or elastically deformable sealing material, which is arranged along the edges (19) of the saddle beneath the clamping material.
30. The clamp (1) in accordance with at least one of the preceding claims, wherein the connection of the mutually associated ends of the flexible tubing or pipe have a butt-jointed transition, further characterized by a continuously encircling ring (17) that is arranged at the site of the transition (16) and projects radially inward.
31. The clamp (1) in accordance with claim 29, further characterized in that the ring (17) is a bead (22) that is impressed into the material of the clamp (1) and of the saddle (18).
32. The clamp (1) in accordance with claim 30, further characterized in that the ring (27) is made of plastic or elastomeric material.
33. The clamp (1) in accordance with at least one of claims 14 to 26, further characterized in that a plastic or highly elastic sealing material is employed on the edges.